

## DELIVERY AGENCY

- 1.What are the upcoming deliveries in their area and details of each delivery?
- 2 Updating the delivery status of the product at every stage.
- 3.How is their work performance relative to other delivery agencies in some city?
- 4.Expanding their services to which areas will be most awarding?
- 5.How satisfied customers are with their delivery service?

### Delivery Agency

1.  $\sigma_{DAID=123 \wedge ETA \geq " < \text{Present date} > "}$  (Delivery)

2. Delivery  $\leftarrow$  (Delivery -  $\sigma_{DeID=123}$  (Delivery))  $\cup$

$\Pi_{DeID, OIA, DAID, " < \text{updated status} > ", ETA} (\sigma_{DeID=123} (\text{Delivery}))$

3. DeliveryReview  $\left( \begin{array}{l} \sigma_{Delivery.DAID = DeliveryAgency.DAID} \\ \wedge Delivery.DeID = DeliveryReview.DeID \\ \wedge K \text{ Delivery Agency filtering conditions} \end{array} \right)$  (Delivery  $\times$  Delivery Agency)  $\rightarrow$  (Delivery Agency  $\times$  Delivery Review)

4. Order.postalcode  $\rightarrow$  count ( $\sigma_{Order.OIA = Delivery.OIA}$ ) (Delivery  $\times$  Order)

Where  $\left\{ \begin{array}{l} \text{group by } Y \\ \text{what to be grouped } \\ \text{condition?} \end{array} \right\}$

5.  $\Pi_{DeliveryReview} \left( \begin{array}{l} \sigma_{DeliveryReview.DRID = Delivery.DeID} \\ \wedge Delivery.DAID = 123 \end{array} \right)$  (Delivery  $\times$  Delivery Review)

Retailers:

1. Are we getting better prices for medicines from the online store?
2. Count the orders placed by that retailer.
3. Which drugs are in high demand?
4. Is there a better alternative to a drug they are selling at their store?
5. Do the drugs they are selling have satisfactory results?

Retailers (small)

1. ~~Π DrugReview~~

1. Π name, price ( $\sigma_{name = "xyz"} (Drug)$ )

2. ~~Π count ( $\sigma_{uid=123} (Drug)$ )~~, via

2.

$uid=123 \times \text{Count} (\sigma_{uid=123} (Drug))$

3.

~~Order.DrugID~~  $\times \text{Count} (\sigma_{Drug.DRUGID = Order.DRUGID} (Drug))$

4. ~~Π DrugReview~~

$\left( \begin{array}{l} \sigma_{Drug.DRUGID = Order.DRUGID} \\ \quad \quad \quad \uparrow \\ \quad \quad \quad \text{DrugReview.DRUGID} = Order.DRUGID \\ \quad \quad \quad \uparrow \\ \quad \quad \quad \text{Drug symptoms like 'xyz'} \\ \quad \quad \quad \uparrow \\ \quad \quad \quad \text{Drug side effects like 'abc'} \end{array} \right) \times \begin{array}{l} \text{Drug} \\ \times \\ \text{Order} \\ \times \\ \text{DrugReview} \end{array}$

5. ~~Π DrugReview~~

$\left( \begin{array}{l} \sigma_{Drug.DRUGID = Order.DRUGID} \\ \quad \quad \quad \uparrow \\ \quad \quad \quad \text{DrugReview.DRUGID} = Order.DRUGID \\ \quad \quad \quad \uparrow \\ \quad \quad \quad \text{Drug.name = "xyz"} \end{array} \right) \times \begin{array}{l} \text{Drug} \\ \times \\ \text{Order} \\ \times \\ \text{DrugReview} \end{array}$

Doctor:

- 1.What are my upcoming appointments?
- 2.Giving a detailed prescription for some narcotic drug to a patient.
- 3 Updating and scheduling the open slots.
- 4.Are the drugs being prescribed have satisfactory results?
- 5.How satisfied patients are after the appointment?

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Drug name - Doctor

1.  $\exists$  Appointment  $\left( \begin{array}{l} \sigma_{Appointment.ID = OpenSlots.ID} \\ OpenSlots.ID = 123 \\ OR \text{slot}.\text{date} \geq " < \text{current date} >" \end{array} \right)$   $\left( \begin{array}{l} \text{Appointment} \\ \times \text{Open Slots} \end{array} \right)$

2. Prescription  $\leftarrow$  Prescription  $\cup \{ (< \text{RxID}, < \text{DrID}, < \text{Unit}, < \text{DID} >) \}^2$

3. Open slots  $\leftarrow$  Open slots  $\cup \{ (< \text{SID}, < \text{DID}, < \text{STIME}, < \text{EDATE} >) \}^2$

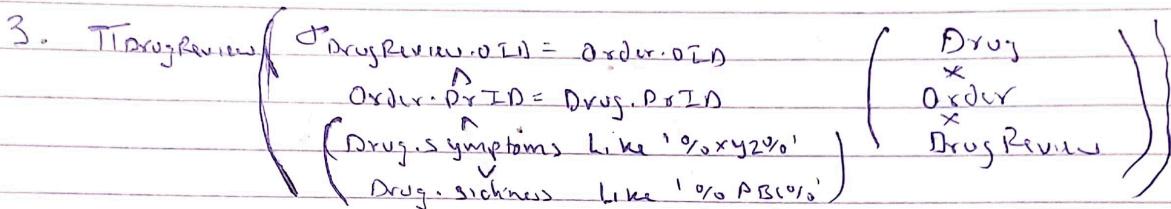
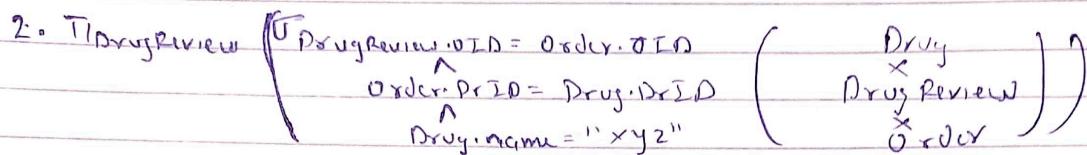
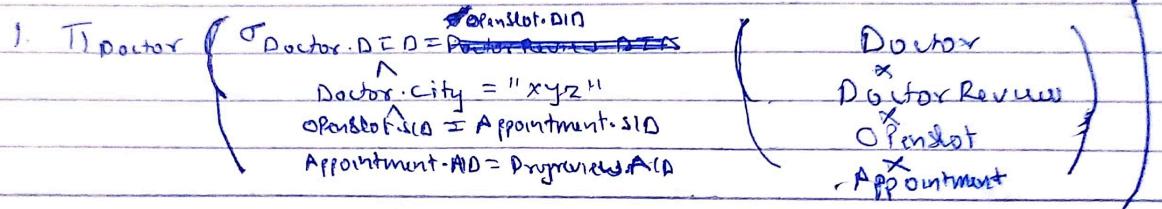
4.  $\exists$  DrugReview  $\left( \begin{array}{l} \sigma_{Prescription.DRIN = Order.DrID} \\ Order.ID = DrugReview.ID \\ Prescription.DID = 123 \end{array} \right)$   $\left( \begin{array}{l} \text{Prescription} \\ \times \text{Order} \\ \times \text{Drug Review} \end{array} \right)$

5.  $\exists$  DoctorReview  $\left( \begin{array}{l} \sigma_{Appointment.ID = OpenSlots.ID} \\ DoctorReview.ID = Appointment.ID \\ OpenSlots.ID = 123 \end{array} \right)$   $\left( \begin{array}{l} \text{Appointment} \\ \times \text{Doctor Review} \\ \times \text{Open Slots} \end{array} \right)$

USER:

1. Who are the best doctors near me for my illness?
2. Can I trust the authenticity of medicines delivered from this online store?
3. Are there better and more economic alternatives available for the prescribed drug?
4. Is the required medicine sufficiently available at this online store?
5. Am I saving money by buying from this store?

User



4. Tname, Quantity ( $\sigma_{\text{name} = "xyz"} (\text{Drug})$ )

5. Tname, Price ( $\sigma_{\text{name} = "xyz"} (\text{Drug})$ )

Company:

1. Are we gaining more profits on this store than a pharmacy?
2. Are we getting enough exposure on this store and how a particular drug is performing in this store?
3. Are all available medicines listed on the online store and are they available in sufficient quantity?
4. Are we providing medicines at a competitive price?
5. Are customers satisfied with the quality of medicines and facility of prescription?

Company

1.  $\text{Ti Name, Price} \left( \sigma_{CID=123} (\text{Drug}) \right)$

2.  $\text{Ti Order} \left( \begin{array}{l} \sigma_{Drug.DxID = Order.DxID} \\ \wedge \\ CID = 123 \end{array} \right) \left( \begin{array}{l} Order \\ \times \\ Drug \end{array} \right)$

3.  $\text{Ti Name, Quantity} \left( \sigma_{CID=123} (\text{Drug}) \right)$

4.  $\text{Ti Name, Price} \left( \begin{array}{l} \sigma_{\substack{\text{Symptoms like } 1\% \times 12\% \\ \wedge \\ \text{Sickness like } 1\% ABC\%}} \\ \left( \begin{array}{l} Drug \end{array} \right) \end{array} \right)$

5.  $\text{Ti DrugReview} \left( \begin{array}{l} \sigma_{Drug.DxID = Order.DxID} \\ \wedge \\ DrugReview.OID = Order.OID \\ \wedge \\ Drug.CID = 123 \end{array} \right) \left( \begin{array}{l} Drug \\ \times \\ Order \\ \times \\ OrderReview \end{array} \right)$

Labs:

1. Which all tests to be conducted for some patient.
2. What are the patient details(eg age/gender etc)?
3. Is the performance of the lab better than other competitive labs?
4. Which diagnostic reports have we made upto now?
5. How satisfied customers are patients with the lab service?

Labs

1.  $\sigma_{TUID = 123 \wedge LabID = 321} (Test)$

2.  $Tl_{Test} (\sigma_{Test.UID = 123 \wedge UserS.UID = Test.UID} (Test \times User))$

3.  $Tl_{LabReview} \left( \begin{array}{l} \sigma_{Lab.LabID = Test.LabID \wedge Test.TID = LabReview.TID} (Test \times Lab \\ \wedge \langle \text{Lab filtering condition} \rangle \times LabReview) \end{array} \right)$

4.  $Tl_{DiagnosticReport} \left( \begin{array}{l} \sigma_{Test.TID = DiagnosticReport.TID} (Test \times DiagnosticReport) \\ \wedge Test.LabID = 123 \end{array} \right)$

5.  $Tl_{LabReview} \left( \sigma_{Test.TID = LabReview.TID \wedge Test.LabID = 123} (Test \times LabReview) \right)$